SKRIPSI

MANIAH

UJI TOKSISITAS AKUT DAN SUBKRONIS PRODUK EKSTRAK MENIRAN (*Phyllanthus niruri* Linn.) TERSTANDAR PADA GINJAL TIKUS PUTIH (*Rattus norvegicus*)

FAKULTAS FARMASI UNIVERSITAS AIRLANGGA
BAGIAN BIOLOGI FARMASI
S U R A B A Y A
2003

Lembar Pengesahan

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ABSTRACT

ACUTE AND SUBCRONIC TOXICITY TEST IN A STANDARDIZED PRODUCT OF PHYLLANTHUS NIRURI L. TO THE KIDNEY OF RATS

Subcronic and acute toxicity test in a standardized product of *Phyllantus niruri* that use creatinin, blood urea nitrogen value also kidney histopatology changed as a parameter has been done on this research.

On acute toxicity test use mice as an animal tester, in the other hand subcronic test use 5 groups of rats as animal tester. We usually give oral preparation in acute toxicity with dose 3,41mg flavonoid/20g mencit and an utilization die animal tester is done after 24 hours start from oral preparation. Subcronic test is done for 2 months and each group is given dose 1(0,125mg flavonoid/200g rat), dose 2 (0,25mg flavonoid /200g rat), dose 3 (0,375mg flavonoid /200 g rat), dose 4 (0,5mg flavonoid /200g rat). After that we take a sample of blood throug intracardial and the kidney for analisys. Analisys for blood urea nitrogen and creatinin value use completely randomized design, and analysis of histopatology is used kruskal wallis test and continue with Mann-Whitney test. The result of acute toxicity test is the standardized product extract of *Phyllanthus niruri* relatif not harmful, analisys result from blood urea nitrogen and creatinin there is no differences between control group and test group.

Keywords *: Standardized Extract product of Phyllanthus niruri, Creatinin, Blood Urea Nitrogen.*

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YANTI WIJAYA

PENENTUAN KADAR Cu, Mn, Zn, DAN Fe DALAM AMPAS TAHU DENGAN METODE SPEKTROFOTOMETRI ABSORPSI ATOM

FAKULTAS FARMASI UNIVERSITAS AIRLANGGA
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PENENTUAN KADAR Cu, Mn, Zn, DAN Fe DALAM AMPAS TAHU DENGAN METODE SPEKTROFOTOMETRI ABSORPSI ATOM

SKRIPSI

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ABSTRACT

The determination of the Cu, Mn, Zn, and Fe in the refuse of tofu by Atomic Absorption Spectrophotometry (AAS) has been done. The concentration of Cu, Mn, Zn, and Fe in sample from four factories were determined after sample preparation by dry ashing procedure (500^0C for 8 hours).

The result of method validation i.e. accuracy, precision, Limit of Detection , Limit of Quantitation , and linearity met the requirement. The Cu, Mn, Zn, and Fe recoveries based on fortified procedure were (101,5 ± 7,0)%, (96,67 ± 4,28)%, (95,82 ± 4,44)%, (92,05 ± 4,95)%, respectively. The precision of Cu, Mn, Zn, and Fe were 6,87%; 4,38%; 4,63%; 5,38%, respectively.

This showed that, the concentration of Cu in four sample were 4,737µg/g; 4,350µg/g 4,807µg/g; 6,458µg/g, respectively. The concentration of Mn in four sample were 90,08µg/g;98,74µg/g; 53,00µg/g; 62,91µg/g, respectively. The concentration of Zn in four sample were 24,31µg/g; 21,55µg/g; 19,44µg/g; 27,01µg/g, respectively. And the concentration of Fe in four sample were 109,6µg/g; 502,7µg/g; 72,41µg/g; 351,5µg/g, respectively. The sample moisture contain were 9,28% (A); 7,73% (B); 9,21% (C); and 7,69% (D), respectively.

Keyword : refuse of tofu, Atomic Absorption Spectrophotometry (AAS), dry ashing, copper, manganese, zinc and iron.

SKRIPSI

NUR DHANI WIDYO UTOMO

AKTIVITAS ANTIMALARIA EKSTRAK METANOL KULIT BATANG CEMPEDAK (*ARTOCARPUS CHAMPEDEN* SPRENG.) TERHADAP *PLASMODIUM BERGHEI IN VIVO*

FAKULTAS FARMASI UNIVERSITAS AIRLANGGA
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Lembar Pengesahan

AKTIVITAS ANTIMALARIA EKSTRAK METANOL KULIT BATANG CEMPEDAK (*ARTOCARPUS CHAMPEDEN* SPRENG.) TERHADAP *PLASMODIUM BERGHEI IN VIVO*

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ABSTRACT

The methanolic extract of *Artocarpus champeden* Spreng. stem bark was evaluated for antimalarial actvity *in vivo*, in 4-day, suppressive assays against Plasmodium berghei ANKA in mice. An *in vivo* model to study the antimalaria effect of plant extract is described. Selected Balb/c mices(20-25 g body weight) were divided into 8 groups, each consist of 3 mice. Each animal was injected with *Plasmodium berghei* infected RBCs. The screening was done by Peter's test, mices were treated orally with diluted extract in dose levels of 1 mg/kg, 12,5 mg/kg, 25 mg/kg, 50 mg/kg, 75 mg/kg and 100 mg/kg for 6 groups start two days after the infection. Two groups served as control. The negative control was treated with 0,5 ml 0,5 % DMSO solution. The positive control was treated with a dose of 10 mg/ kg body weight Chloroquine diphosphat solution. The. concentration of methanolic extract required for 50% suppression (ED_{50}) of *P. berghei* in mice was 6,95419 mg/kg.

Key words: *Artocarpus champeden* Spreng., *Plasmodium berghei*, Antimalarial activity, Peter's test.